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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/525,160	09/26/2005	Ralf Ulrich	P0-7856/LcA 36,229	5659

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Lanxess Corporation
Law & Intellectual Property Department
111 Ride Park West Drive
Pittsburgh, PA 15275-1112

EXAMINER

USELDING, JOHN E

ART UNIT	PAPER NUMBER
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4171

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07/18/2008

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/525,160	Applicant(s) ULRICH ET AL.	
	Examiner John Uselding	Art Unit 4171	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-3 and 11-16 is/are pending in the application.
 4a) Of the above claim(s) 4-10 is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-3 and 11-16 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. ____. |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>1/22/2007, 1/23/2007</u> . | 6) <input type="checkbox"/> Other: ____. |

DETAILED ACTION

Claim Objections

1. Claims 4-10 are objected to under 37 CFR 1.75(c) as being in improper form because a multiple dependent claim cannot depend from any other multiple dependent claim. See MPEP § 608.01(n). Accordingly, the claims have not been further treated on the merits.

Claim Rejections - 35 USC § 112

2. Claims 13, 15, and 16 provides for the use of molding compositions, articles, and copolymers, but, since the claim does not set forth any steps involved in the method/process, it is unclear what method/process applicant is intending to encompass. A claim is indefinite where it merely recites a use without any active, positive steps delimiting how this use is actually practiced.
3. Claim 12 recites the limitation "the elastomer" in claim 1. There is insufficient antecedent basis for this limitation in the claim.

Claim Rejections - 35 USC § 101

4. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

5. Claims 13, 15, and 16 are rejected under 35 U.S.C. 101 because the claimed recitation of a use, without setting forth any steps involved in the process, results in an improper definition of a process, i.e., results in a claim which is not a proper process claim under 35 U.S.C. 101. See for example *Ex parte Dunki*, 153 USPQ 678 (Bd.App. 1967) and *Clinical Products, Ltd. v. Brenner*, 255 F. Supp. 131, 149 USPQ 475 (D.D.C. 1966).

Claim Rejections - 35 USC § 102

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

7. Claims 1-3, 11-16 are rejected under 35 U.S.C. 102(b) as being anticipated by Tomoyuki et al. (JP 08-239528).

8. Regarding claims 1-3: applicant claims a composition comprising 50-99% polyamide and 1-50% ethylene-vinyl acetate polymer. Tomoyuki et al. teach a composition comprising 10-90% polyamide and 10-90% ethylene vinyl acetate polymer (paragraphs 0005 and 0017). There is an overlap of about 40-50% between the ranges which is significant, and therefore anticipated.

9. Regarding claim 11: applicant claims a process for preparing the composition of claim 1 by melt compounding the constituents. The claim states that the nanoscale millers and elastomers "may" be put in as well but are not necessary. May is a

permissive terms which renders the following clause optional. Tomoyuki et al. teach melt molding their composition (paragraph 0023).

10. Regarding claim 12: applicant claims that the elastomer is incorporated in the form of a masterbatch or a pellet mixture. It is not specified what the elastomer is incorporated into and therefore it is left open to a variety of interpretations. Tomoyuki et al. teach pelletizing their components. The whole composition, including ethylene vinyl acetate copolymer is pelletized and then incorporated into mixer (paragraph 0023).

11. Regarding claims 13-15: applicant claims hollow articles, such as tanks, made from their composition. Tomoyuki et al. teach that their composition can be used to make a gas tank (paragraph 0035).

12. Regarding claim 16: applicant claims that the copolymers improve the buckling endurance of thermoplastics. The buckling endurance is a property of the polymers used. Tomoyuki et al. use the same polymers, therefore they inherently teach the improvement of the buckling endurance.

13. Claims 1-3, 11-14, and 16 are rejected under 35 U.S.C. 102(b) as being anticipated by Toru et al. (JP 05-140386).

14. Regarding claims 1-3: applicant claims a composition comprising 50-99% polyamide and 1-50% ethylene-vinyl acetate polymer. Toru et al. teach a composition comprising 5-95% polyamide and 5-95% ethylene vinyl acetate polymer (paragraphs 0005 and 0017). There is an overlap of about 45-55% between the ranges which is significant, and therefore anticipated.

15. Regarding claim 11: applicant claims a process for preparing the composition of claim 1 by melt compounding the constituents. The claim states that the nanoscale millers and elastomers "may" be put in as well but are not necessary. May is a permissive terms which renders the following clause optional. Toru et al. teach melt molding their composition (paragraph 0018).

16. Regarding claim 12: applicant claims that the elastomer is incorporated in the form of a masterbatch or a pellet mixture. Toru et al. teach that the entire composition, including any elastomer present is incorporated in the form of a pellet (paragraph 0018).

17. Regarding claims 13-14: applicant claims moldings made from their composition. Toru et al. teach that their composition can be used to make various molded articles (paragraph 0018).

18. Regarding claim 16: applicant claims that the copolymers improve the buckling endurance of thermoplastics. The buckling endurance is a property of the polymers used. Toru et al. use the same polymers, therefore they inherently teach the improvement of the buckling endurance.

Claim Rejections - 35 USC § 103

19. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

20. Claims 1-3 and 11-16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tachi et al. (5,443,874).

21. What applicant claims is listed above.

22. Tachi et al. teach hollow moldings used for hollow articles such as fuel tanks (column 1, lines 5-18). They use a composition comprising polyamide resins and ethylene-vinyl acetate copolymers (column 2, lines 30-40 and column 9, lines 35-45). They teach a process of preparing the composition by melt molding it in extruders (column 7, lines 46-50). Barrier layer pellets, which contain ethylene vinyl acetate are incorporated into high molecular weight polyethylene (column 10, lines 33-45). This satisfies claim 12 where the elastomer is incorporated into the composition in the form of a pellet. They use the same ethylene vinyl acetate copolymer so they improve the buckling endurance of thermoplastics. The polyamides are used for improving the bonding properties of the barrier layer (column 5, lines 60-62).

23. Tachi et al. fail to teach the weight ratio of polyamide to ethylene vinyl acetate copolymer used in their composition.

24. It would have been obvious to one of ordinary skill in the art at the time the invention was made to optimize the weight ratio of polyamide to ethylene vinyl acetate copolymer used in the composition of Tachi et al. depending on the desired barrier layer properties. The amount of ethylene vinyl acetate would be optimized for a desired buckling endurance and the polyamide would be optimized for desired bonding properties of the barrier layer.

25. Claims 1-3, 11-16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tomoyuki et al. (JP 08-239528).
26. Applicant claims what is listed above.
27. Tomoyuki et al. teach what is listed above.
28. Applicant claims a composition comprising 50-99% polyamide and 1-50% ethylene-vinyl acetate polymer. Tomoyuki et al. teach a composition comprising 10-90% polyamide and 10-90% ethylene vinyl acetate polymer (paragraphs 0005 and 0017). There is an overlap of about 40-50% between the ranges which is significant.. However, Tomoyuki et al. fail to teach the same ranges as the applicant.
29. The subject matter as a whole would have been obvious to one having ordinary skill in the art at the time the invention was made, since it has been held that choosing the over lapping portion, of the range taught in the prior art and the range claimed by the applicant, has been held to be a *prima facie* case of obviousness, see *In re Malagari*, 182 USPQ 549.
30. Claims 1-3, 11-14, and 16 are rejected under 35 U.S.C. 102(b) as being unpatentable over Toru et al. (JP 05-140386).
31. Applicant claims what is listed above.
32. Toru et al. teach what is listed above.
33. Applicant claims a composition comprising 50-99% polyamide and 1-50% ethylene-vinyl acetate polymer. Toru et al. teach a composition comprising 5-95% polyamide and 5-95% ethylene vinyl acetate polymer (paragraphs 0005 and 0017).

There is an overlap of about 45-55% between the ranges which is significant.. However, Toru et al. fail to teach the exact same range as the applicant.

34. The subject matter as a whole would have been obvious to one having ordinary skill in the art at the time the invention was made, since it has been held that choosing the over lapping portion, of the range taught in the prior art and the range claimed by the applicant, has been held to be a *prima facie* case of obviousness, see *In re Malagari*, 182 USPQ 549.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to John Uselding whose telephone number is (571)270-5463. The examiner can normally be reached on Monday-Thursday 6:00a.m. to 4:30p.m. EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Larry Tarazano can be reached on 571-272-1515. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/D. Lawrence Tarazano/
Supervisory Patent Examiner, Art Unit 4171

John Uselding
Examiner
Art Unit 4171

/JEU/